



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/796,231

03/09/2004

Marc Husemann

tesa 1649-WCG

2181

27386

7590

04/20/2009

NORRIS, MCLAUGHLIN & MARCUS, P.A.

875 THIRD AVE

18TH FLOOR

NEW YORK, NY 10022

EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

04/20/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/796,231	Applicant(s) HUSEMANN ET AL.	
	Examiner Katarzyna Wyrozebski	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,11-13 and 15-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11-13 and 15-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1796

In view of applicant's amendment, and request for consideration following office action is rendered non-final.

Claim 4 – the examiner's objection was directed to term "substituted" and "alkyl" removal of term "alkyl" improperly broadens the scope of the claims to moieties not present or not supported by the specification. The examiner requests that the applicants incorporate back term "N-alkyl substituted amide". The objection will be withdrawn.

During updated search for a composition consisting of ammonium polyphosphate as flame retardant new reference was found and is hereby applied. New reference necessitates new grounds of rejection.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5-9, 11-13, 15-17, 19-31 are rejected under 35 U.S.C. 102(b) as being anticipated by AZUMA JP 09-286958 (machine translation).

Art Unit: 1796

AZUMA discloses a flame retardant that has tacky consistency and is utilized in, for example, tapes. Composition comprises following:

a) 100 pbw of acrylic based polymer, wherein acrylic polymer is copolymerized with vinyl monomer.

b) 5-70 pbw of ammonium polyphosphate (flame retardant), nitrogen containing compound (HALS stabilizer) and metallic oxide (filler) (ABSTRACT).

Acrylic polymer is disclosed in [0011-00113] as acrylate based polymer co-polymerized with vinyl monomer. Vinyl monomers include carbonyl containing compounds such as other acrylates as well as [0014-0016] N-vinyl pyrrolidone, acids, anhydrides, acrylonitrile and the like, including polyfunctional monomers. Monomer such as divinyl benzene is enabled in [0016]. Acrylate component of AZUMA is utilized in monomers, which would further signify that their molecular weight is well below 600,000 g/mol. Photocuring action results in crosslinking of the composition, yet maintaining proper tack and Tg of less than -50°C. Even when crosslinked with tacky consistency, the molecular weight will also be less than 600,000 g/mol.

Ammonium polyphosphate has molecular weight of 200-1000 [0017]. The ammonium compound is utilized in conjunction with melamine resins, which are also known as tackifiers.

Nitrogen compound is cyclic nitrogen, wherein nitrogens are substituted with compounds such as hydroxy aryl group and alkyls having 1-16 carbon atoms. Such compounds are known are HALS and are thermal stabilizers. Alternative is isocyanate compounds, which are known

Art Unit: 1796

curing agents or crosslinking agents reactive with melamine formaldehyde resin coated on surface of ammonium polyphosphate.

Metallic oxide filler, although claimed is not discussed by AZUMA in its specification at all. The assumption that the metallic oxide filler is an optional component is therefore proper.

Composition of AZUMA is photo-curable, wherein photocuring is initiated by compounds disclosed in [0018] such as acetophenones, ketones by polymerizing said monomers in situ.

In the light of the above disclosure, the prior art of AZUMA anticipates claims rejected above.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

4. Claims 4, 18, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over AZUMA as applied above in view of PARSON or BOYCE as applied previously.

The difference between instant invention and the teachings of AZUMA is recitation of different tackifying agents as well as their amount.

PARSONS of BOYCE discloses another adhesive composition wherein the tackifiers include hydrogenated resins, glyceryl esters, terpene, rubbers, phenolic resins, petroleum resins

Art Unit: 1796

and the like (col. 4), which resins are utilized in amount of 40-150 wt % per 100 parts of acrylic matrix polymer. In BOYCE the amount of the tackifiers is in amount of up to 250 pbw

Addition of tackifiers as suggested by its function would alter the tackiness of the composition so that it could be utilized with various types of substrates as well as compounding which could include extrusion and melt processing.

In the light of the above disclosure, it would have been obvious to one having ordinary skill in the art to add tackifying agents other than melamine and formaldehyde into composition of AZUMA and thereby obtain claimed invention. Such modification could alter tackiness of the composition, wherein tackiness is one of the properties of AZUMA.

Applicant's arguments are considered moot since new prior art of AZUMA is hereby applied.

The prior art of AZUMA only teaches ammonium polyphosphate as flame retardant. The examiner would like to point out that the prior art of PARSONS is utilized for its recitation of tackifying agent, which is the grounds of the rejection. Not the types or amounts of flame retardants.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 8:30 AM-2:30 PM.

Art Unit: 1796

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Katarzyna Wyrozebski/
Primary Examiner, Art Unit 1796
April 17, 2009